

Chapter 1: Introduction and Background

Shiawassee National Wildlife Refuge – a large area of *wetlands*¹ and forests within the agricultural and urban landscape of Michigan's lower peninsula – is recognized as globally significant to migratory waterfowl and is proximate to a large urban and tourist population. In this plan we describe how we will provide for migratory *species* within our boundaries, work with partners to improve habitats beyond our boundaries, expand opportunities for wildlife viewing and fishing, and develop environmental education and outreach programs to increase appreciation of fish and wildlife.

Introduction

The Shiawassee National Wildlife Refuge (Refuge) was established in 1953 and is 9,706 acres in size. The Refuge is located within Saginaw County, Michigan and is surrounded by both urban and agricultural areas.

Figure 1.1: Refuge Location



Refuge Purposes

The Refuge was authorized by the Migratory Bird Conservation Commission under the Migratory Bird Conservation Act (16 U.S.C. § 715 - 715s) “... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” Additional purposes designated under the Refuge Recreation Act (16 U.S.C. § 460k-1) are “... (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, [and] (3) the conservation of endangered and *threatened species*.”

The Shiawassee National Wildlife Refuge is responsible for managing three other facilities: the 304-acre Wyandotte National Wildlife Refuge; the 602-acre Michigan Islands National Wildlife Refuge; and the Saginaw City-owned, 80-acre Green Point Environmental Learning Center (ELC). The management of the Wyandotte and Michigan Islands national wildlife refuges are described in separate *comprehensive conservation plans*.

When established in 1953, the Refuge and the associated state area were envisioned as providing a

¹ For the convenience of non-technical readers, definitions to italicized words are provided in Appendix B.

place where waterfowl from the Saginaw Bay area could be held longer before they migrated to southern Illinois. Since its establishment, the Refuge has shown its importance to migrating waterfowl, including the Southern James Bay population of Canada geese and American black ducks, the production of waterfowl, and for other wildlife.

Shiawassee National Wildlife Refuge manages a variety of habitats that provide resting, foraging, and nesting opportunities for nearly 300 species of resident and migratory birds. The major habitat types include wetlands (3,771 acres), forests (4,225 acres), agricultural lands (1,180 acres), and grasslands (580 acres). This diversity of habitats also supports an abundance of plant, mammal, reptile, amphibian, and fish species.



Photo by Myles Willard

The management techniques currently used on the Refuge include control of water levels in moist soil units and pools, biological and chemical control of invasive plant species, prescribed burning, mowing, tree planting, grass seeding, furbearer trapping and hunting of white-tailed deer and Canada geese.

In 1995, the U.S. Fish and Wildlife Service considered alternative ways to better protect the Refuge resources at Shiawassee National Wildlife Refuge. After evaluating the *alternatives*, the Service decided to pursue the addition of approximately 7,500 acres to the existing Refuge (Shiawassee National Wildlife Refuge Additions Final Environmental Assessment, 1995). If all authorized acres are eventually acquired, the Refuge will include approximately 16,600 acres. The additions will be primarily along the Tittabawassee and Cass River corridors. These waterways are two of the four rivers that converge on the Refuge and make up Michigan's largest *watershed*, and their environmental integrity is vital to the health of the Refuge's core.

The staffing of Shiawassee National Wildlife Refuge consists of 10 positions:

- two refuge operations specialists
- one refuge manager
- one administrative technician
- one wildlife biologist
- one biological science technician
- two park rangers
- one engineering equipment operator
- one tractor operator

The park rangers are stationed at Green Point Environmental Learning Center.

The Refuge Mission

To preserve and manage an undeveloped expanse of floodplain forest, marshes, rivers, and associated habitat within an agricultural and urban landscape through habitat management, encouraging public stewardship, educational programs, and private land activities.

Purpose of and Need for the Plan

This Comprehensive Conservation Plan, or CCP, identifies the role the Refuge will play in supporting the mission of the *National Wildlife Refuge System* and provides guidance for Refuge management. The plan articulates management *goals* for the next 15 years and specifies *objectives* and *strategies* that will achieve those goals. Several legislative mandates within the National Wildlife Refuge System Improvement Act of 1997 have guided the development of this plan. These mandates include:

- Wildlife has first priority in the management of refuges.
- *Wildlife-dependent recreation activities* of hunting, fishing, wildlife observation, wildlife photography, environmental education and interpretation are the priority public uses of the National Wildlife Refuge System. These uses will be facilitated when they do not interfere with our ability to fulfill the Refuge's purposes or the mission of the National Wildlife Refuge System.
- Other uses of the Refuge will only be allowed when they are determined to be appropriate and *compatible* with the Refuge purposes and mission of the National Wildlife Refuge System.

This CCP will enhance the management of the Shiawassee National Wildlife Refuge by:

- Providing a clear statement of direction for future management of the Refuge.
- Giving Refuge neighbors, visitors, and the general public an understanding of the Service's management actions on and around the Refuge.
- Ensuring that the Refuge's management actions and programs are consistent with the mandates of the National Wildlife Refuge System.
- Establishing continuity in Refuge management.
- Providing a basis for the development of budget requests on the Refuge's operation, maintenance, and capital improvement needs.

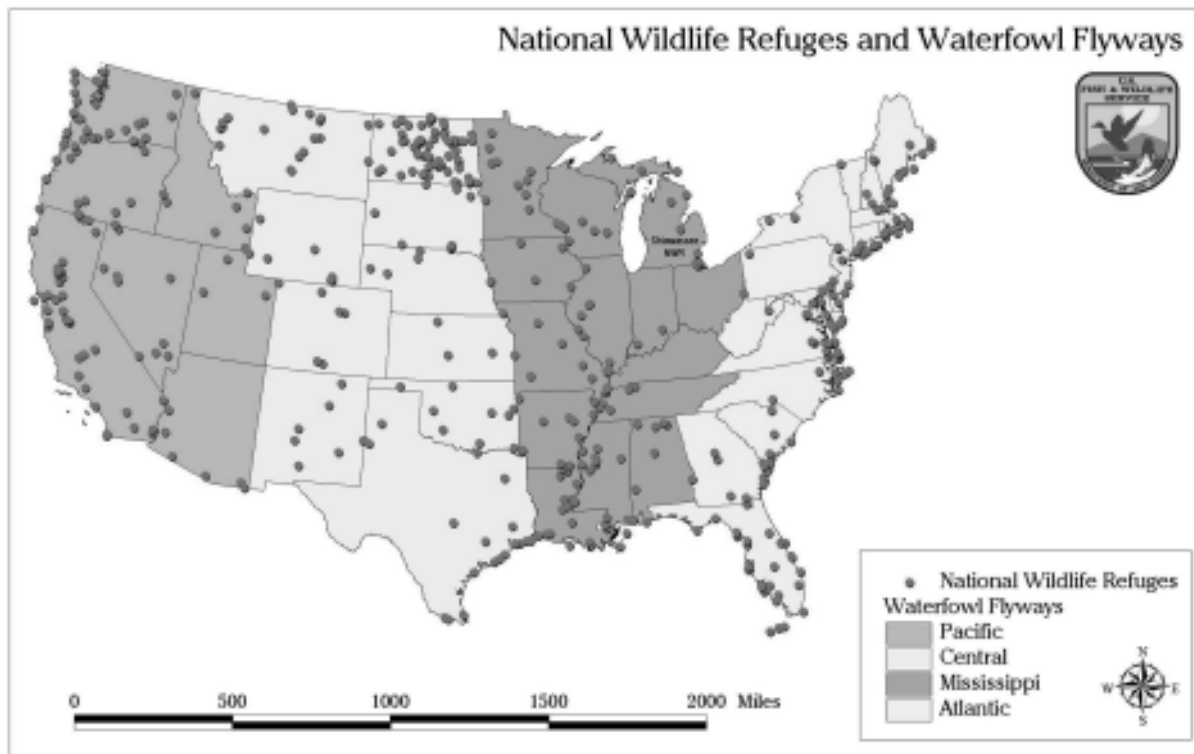
The U.S. Fish and Wildlife Service

"Working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people."

Mission of the U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service is the primary Federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. Specific responsibilities include enforcing Federal wildlife laws, managing migratory bird populations, restoring nationally significant fisheries, administering the Endangered Species Act, and restoring wildlife habitat such as wetlands. The Service also manages the National Wildlife Refuge System.

Figure 1.2: National Wildlife Refuges and Waterfowl Flyways



The National Wildlife Refuge System

"To administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

Mission of the National Wildlife Refuge System

Managing the National Wildlife Refuge System has evolved into a significant role for the Service. Founded in 1903 by President Theodore Roosevelt with the designation of Pelican Island as a refuge for brown pelicans, the National Wildlife Refuge System is the world's largest collection of lands specifically managed for fish and wildlife. The System is a network of more than 500 national wildlife refuges encompassing more than 93 million acres of public land and water. The majority of these lands – 82 percent – is in Alaska, with approximately 16 million acres spread across the other states and several island territories. Refuges provide habitat for more than 5,000 species of birds, mammals, fish, and insects. Like Pelican Island, many early national wildlife refuges were created for herons, egrets and other water birds. Others were set aside for large mammals such as elk and bison. Most refuges, however, have been created to protect migratory waterfowl. This is a result of the United States' responsibilities under international treaties for migratory bird conservation as well as other legislation, such as the Migratory Bird Conservation Act of 1929. A map of the National Wildlife Refuge System shows refuges dotting the four major flyways that waterfowl follow from their northern nesting grounds to southern wintering areas.

National wildlife refuges also play a vital role in preserving endangered and threatened species. Among the refuges that are well known for providing habitat for *endangered species* are Aransas National Wildlife Refuge in Texas, the winter home of the whooping crane; the Florida Panther Refuge, which protects one of the nation's most endangered mammals; and the Hawaiian Islands Refuge, home of the Laysan duck, Hawaiian monk seal, and many other unique species.

Refuges also provide unique opportunities for people. When it is compatible with wildlife and habitat needs, refuges can be used for wildlife-dependent activities such as hunting, fishing, wildlife observation, photography, environmental education and environmental interpretation. Many refuges have visitor centers, wildlife trails, automobile tours, and environmental education programs. Nationwide, more than 36 million people visited national wildlife refuges in 2000.

The National Wildlife Refuge System Improvement Act of 1997 established many mandates aimed at making the management of national wildlife refuges more cohesive. The preparation of comprehensive conservation plans is one of those mandates. The legislation requires the Secretary of the Interior to ensure that the mission of the National Wildlife Refuge System and purposes of the individual refuges are carried out. It also requires the Secretary to maintain the biological integrity, diversity, and environmental health of the refuge system.



Photo by Steve Lewis

Existing Partnerships

Partnerships with other Federal agencies as well as tribal, state, and city governments and schools are an important element in refuge management. Other agencies can provide invaluable assistance in research and maintenance. Partnerships with private groups greatly enhance public investment in the refuge, building enthusiasm for its mission and support in funding issues.

In addition to the official partnerships that the U.S. Fish and Wildlife Service holds on a national level, Shiawassee National Wildlife Refuge maintains informal partnerships with the Shiawassee Flats Advisory Council, The Friends of Shiawassee National Wildlife Refuge, The Great Lakes Basin Ecosystem Team, Saginaw Bay Watershed Initiative Network (WIN), the City of Saginaw, and Bridgeport Township. Within the Private Lands Program, the Refuge maintains partnerships with 14 Soil and Water Conservation Districts, local Pheasants Forever chapters, Great Lakes Regional Office of Ducks Unlimited, Inc., Michigan Duck Hunters Association, Michigan Wildlife Habitat Foundation, the Michigan Department of Natural Resources, the United States Department of Agriculture's Natural Resources Conservation Service, and the Service's State Private Lands Coordinator's Office.

Legal and Policy Guidance

In addition to the Refuge's establishing authority legislation and the National Wildlife Refuge System Improvement Act of 1997, several federal laws, executive orders, and regulations govern its administration. See Appendix F for a list of the guiding laws and orders.